



**We're
on a**
Mission

...supporting future combat systems



Office of the Project Manager for Close Combat Systems

OPM-CCS

Foreword

The Office of the Project Manager for Close Combat Systems (OPM-CCS) is on a mission. A mission to ensure that ground troops have the freedom to move freely on the battlefield and the capability to stop unfriendly troop movement in its tracks. We do this by focusing on the following areas:

- Smart Mines/Munitions
- Countermine
- Demolitions
- Non-Lethal Capabilities
- Antipersonnel Landmine Alternatives

This brochure is designed to give you an overview of our capabilities in these areas as well as our mission, current capabilities and planned improvements. We trust it conveys OPM-CCS' commitment to developing equipment that will help the warfighter meet the challenges we will inevitably encounter in mobility and countermobility technology in future combat and peacekeeping missions while contributing to the safety, reliability, effectiveness and sustainability of our forces.



Vision

“Organize, train, coach and mentor the organization to leverage its resources toward acquisition and continuous improvement while maintaining a warfighter focus.”

Mission

“Perform Army centralized management of assigned programs. Responsible for Life Cycle Management including development, acquisition, testing, systems integration, product improvement and fielding. All activities center on placing safe, reliable, effective and supportable equipment in the hands of our warfighters.”



Maintaining freedom to move on the battlefield is mission-essential for Army ground forces. And, our vision and mission as Office of the Project Manager for Close Combat Systems is to ensure that our soldiers have this capability by developing and supporting technologically advanced mine, countermine, demolition and non-lethal capabilities. Our objective in doing so is to protect our forces, increase our mobility and enhance our ability to transform the terrain of the battlefield to our advantage. To accomplish this, OPM-CCS, a subordinate project office of the Program Executive Officer for Ammunition (PEO-Ammo)...

- Manages all mine, countermine, demolition and non-lethal programs for the U.S. Army and Special Operations Command.
- Oversees all technical activities, funding, program integration and interoperability related to CCS programs.
- Interfaces with other military services, project managers, commands and the U.S. Army in matters within its mission areas; represents CCS programs to national and international constituencies.
- Manages resources for CCS programs in the most cost-effective manner to accomplish the OPM-CCS mission.





Mines

Building a strong deterrent

Mines are one of the oldest, most versatile and cost-effective weapons available. Their design and capability has advanced as microelectronic technology has evolved. New, smaller, more lethal mines now provide the capability for rapid emplacement of self-destructing antiarmor (AT) and antipersonnel (AP) minefields in a variety of modes from hand emplacement to air and ground platforms. Our mission is to move the U.S. Army toward an Advanced Intelligent Minefield (IMF) concept as part of an overall "Intelligent Battlefield." We are doing this with systems like the Hornet Wide Area Munition, which is easily emplaced and highly lethal, and the RAPTOR, a suite of munitions with advanced sensor and communication capabilities.



Bunker Defeat Munition

Special weapons fill critical capability void

The Bunker Defeat Munition (BDM) is a modified Non-Developmental Item (NDI) that will meet an urgent FORSCOM requirement to fill the "Bunker Buster" void in the Army inventory. The shoulder-fired system is effective against targets including fortified positions (earth and timber bunkers), breaching masonry walls and neutralizing light armored vehicles at ranges of 15-500 meters. The system is fully operational at 11 meters making it an optimum weapon for Military Operations in Urban Terrain. Our mission is to rapidly field this munition to support contingency mission operations.

Grenades

Effectiveness in close combat

Hand grenades are effective in giving soldiers the ability to destroy enemy equipment and kill enemy soldiers in close combat warfare. They are also employed for signaling, screening, producing incendiary effects and riot control. U.S. forces use a variety of grenades depending on the situation. Our mission is to improve the capabilities of these small, hand-armed, short-range weapons in support of soldier safety and effectiveness.

Countermine

Enabling mobility and force protection

Countermine operations focus on the Army's ability to search for, detect, mark and neutralize mines, plan and carry out breaching and undertake the clearance of minefields. Our mission is to integrate modern technologies into handheld, ground and airborne detection systems as well as breaching and clearing systems. One example is the Handheld Standoff Mine Detection System (HSTAMIDS), a multisensor landmine detection system with on-board data processing and audio target alert. Another is the Mine Protected Clearance Vehicle, which gives soldiers superior protection while carrying out Ground Standoff Mine Detection System (GSTAMIDS) activities.



Demolitions

Creating an effective, efficient strategy

Demolitions are used to meet numerous battlefield needs, from clearing landmines to creating and clearing obstacles to precision multi-purpose munitions. Our mission is to develop and field smaller, lighter and more capable demolition devices, electronic timers, remote activation devices and selectable multipurpose munitions. These include the Remote Activation Munition System (RAMS), a pocket-sized device that uses radio frequency to detonate explosives, and the Special Operations Forces Demolition Kit (SDK), which allows the user to tailor equipment to the mission.



Pyrotechnic Simulators and Signals

Soldiers train the way they fight

Pyrotechnic Simulators are used to effectively train troops under realistic battlefield conditions at a reduced cost and lower risk of soldier injury. They range from armored vehicles conducting force-on-force combat maneuvers to lasers that provide the realistic sound and flash of the main gun firing. At the end of the day, everyone walks away safely and the full training effect is achieved. Our mission is to provide research, development, engineering and fielding of new and improved simulator and signal designs and pyrotechnic mixtures that provide soldiers with the training and effects they require.

Non-Lethal Capabilities

Protecting our own and others

Non-lethal capabilities expand the options available to commanders in dealing with missions like humanitarian assistance, military support to civil authorities, peace operations, and noncombatant evacuations. Our mission is to ensure the development, production, fielding and sustainment of the Army's non-lethal capabilities ranging from weapons and munitions to individual protective equipment to enhancement devices. A collection of these capabilities is captured in a set, providing the commander in the field with an instant capability. Future development will allow the fielding of superior systems that operate across the full spectrum of military operations to meet future Army requirements.

Pyrotechnic Flares and Countermeasures

There is no second chance at survivability

Pyrotechnic Flares and Countermeasures are used to effectively illuminate the battlefield or provide effective countermeasures against a threat. Our mission is to develop new and improved flares and countermeasures that provide the soldiers and aviators the illumination and survivability they require.

Antipersonnel Landmine Alternatives

Maintaining warfighting needs

The Presidential Decision Directive to pursue alternatives to Antipersonnel Landmines (APLs) identified OPM-CCS to lead the initiative. In Track 1, OPM-CCS will evaluate two programs: Non-Self Destruct Alternatives (NSD-A); and, the Remote Area Denial Artillery Munition (RADAM). Track 2, an investigation of maneuver denial approaches using advanced technology will be headed by the Defense Advanced Research Projects Agency (DARPA). OPM-CCS is in position to take the lead from the Office of the Secretary of Defense (OSD) for Track 3, which involves searching for alternatives to mixed landmine systems.





Equipment for the Warfighter

- Pursuit Deterrent Munition (PDM) M86
- Modular Pack Mine System (MOPMS) M131
- Flipper M136
- Volcano Ground & Air Systems
- Volcano M87A1
- M624 Mine Fuze
- AN/PSS12 Mine Detector
- Mine Clearing Line Charge (MICLIC)
- Mine Clearing Blade (M1)/Mounting Kit
- Mine Clearing Roller (M1)/Mounting Kit
- Clear Lane Marking System (Clams)/Mounting Kit
- VEMASID
- Mine Clearing Rake (M728 & M60)
- Time Delay Firing Device (M147)
- Selectable Lightweight Attack Munition (SLAM)
- Remote Activation Munition System (RAMS)
- Modernized Demolition Initiators (MDI)
- Hornet Wide Area Munition
- Fighting Position Excavator (FPE)
- Launched Grapnel Hook (LGH)
- Interim Vehicle Mounted Mine Detector (IVMMD)
- Titanium Mine Probe
- Penetration Augmented Munition (PAM)
- Modular Crowd Control Munition (MCCM) Portable
- Portable Vehicle Arresting Barrier (PVAB)
- Remote Area Denial Artillery Munition (RADAM)
- Non-Lethal Capability Set (NLCS)

R&D Programs

- Advanced Hornet
- Intelligent Combat Outpost RAPTOR
- Non-Self Destruct Alternatives (NSD-A)
- Rapid Tactical Terrain Limiter (RATTLER)
- Countermine Capability Set (CMCS)
- Ground Standoff Mine Detection System (GSTAMIDS)
- GSTAMIDS Block 1 and Block 2
- Mine Protected Clearance Vehicle (MPCV)
- Handheld Standoff Mine Detection System (HSTAMIDS)
- Explosive Standoff Minefield Clearer MONGOOSE
- MCCM Vehicle Mount System
- SOF Demolition Kit Extra Large EFP
- SOF Demolition Kit Multiple EFP & Cable Cutter
- Sympathetic Detonator Timer
- Volcano Upgrades

Production

- Hornet Wide Area Munition
- Remote Area Denial Artillery Munition (RADAM)
- Antipersonnel Obstacle Breaching System (APOBS)
- Portable Vehicle Arresting Barrier (PVAB)
- Modular Crowd Control Munition (MCCM)
- Remote Activation Munition System (RAMS)
- SOF Demolition Kit
- Selectable Lightweight Attack Munition (SLAM)
- Gunfire Detection System
- Volcano
- Non-Lethal Capability Set (NLCS)
- Fighting Position Excavator
- Modernized Demolition Initiators (MDI)



<http://mcdweb.pica.army.mil>

Partners

The Office of the Project Manager for Close Combat Systems is a subordinate project office of the Program Executive Officer for Ammunition (PEO-Ammo). In fulfilling its mission, OPM-CCS works closely with various business partners to define potential materiel solutions to mine, countermine and demolitions requirements, develop technologies to satisfy those requirements, and procure superior new equipment for our warfighters.

Warfighter Partners

- U.S. Army Maneuver Support Center MANSCEN, Ft. Leonard Wood, MO
U.S. Army Engineer School
U.S. Army Military Police School
- U.S. Special Operations Command (USSOCOM), MacDill AFB, FL
U.S. Army Special Operations Command (USASOC), Ft. Bragg, NC
U.S. Naval Special Warfare Center (NAVSPEC), San Diego, CA
- U.S. Marine Corps Combat Development Command (USMCCDC), Quantico, VA
- U.S. Army Infantry School (USAIS), Ft. Benning, GA
- U.S. Army Field Artillery School, Ft. Sill, OK
- U.S. Army Armor Center, Ft. Knox, KY
- U.S. Army Night Vision and Electronic Sensors Directorate (NVESD), Ft. Belvoir, VA

Development Partners

- Deputy for Systems Acquisition (DSA), U.S. Army Tank-automotive and Armaments Command (TACOM), Warren, MI
- Project Manager for Family of Medium Tactical Vehicles (PM-FMTV), Warren, MI
- Tank-automotive Research, Development and Engineering Center (TARDEC), Warren, MI
- Project Manager for Abrams, Warren, MI
- Project Manager for Bradley, Warren, MI
- U.S. Army Research, Development and Engineering Center (ARDEC), Picatinny Arsenal, NJ
- U.S. Army Communications/Electronics Command (CECOM), Ft. Monmouth, NJ
- Night Vision and Electronics Sensors Directorate (NVESD), Ft. Belvoir, VA
- U.S. Army Research Laboratory (ARL), Adelphi, MD
- Joint Project Office for Unmanned Ground Vehicles (JPO-UGV), Huntsville, AL
- Project Manager for Obscuration and Decontamination Systems (PM-ODS), Edgewood Arsenal, MD
- U.S. Army Simulation, Training and Instrumentation Command (STRICOM), Orlando, FL
- Joint Non-Lethal Weapons Directorate, Quantico, VA
- Project Manager for Brigade Combat Team (PM-BCT), Warren, MI
- Program Office for Physical Security Equipment (PM-PSE), Ft. Belvoir, VA



Office of the Project Manager for
Close Combat Systems
Attn: SFAE-AMO-CCS
Picatinny Arsenal, NJ 07806-5000
Phone: (973)724-7041
<http://mcdweb.pica.army.mil>